

CLAIMS

- 1 1. An equipment enclosure that establishes an enclosed environment separated
2 from an ambient environment and has a cooling system that draws air from an
3 intake space in the enclosed environment and discharges air into a discharge
4 space in the enclosed environment, the enclosure comprising:
 - 5 a first louver that responds to a pressure differential between the intake
6 space and the ambient environment to connect the intake space to the ambient
7 environment when the cooling system fails; and
 - 8 a second louver that responds to a pressure differential between the
9 discharge space and the ambient environment to connect the discharge space to
10 the ambient environment when the cooling system fails.
- 1 2. The equipment enclosure of claim 1 wherein the enclosure contains electronic
2 equipment with air movers that generate an air flow from the discharge space
3 into the intake space and wherein a pressure in the intake space is produced by
4 a difference between an air flow produced by the cooling system and an air flow
5 produced by the air movers.
- 1 3. The equipment enclosure of claim 1 wherein the enclosure contains electronic
2 equipment with air movers that generate an air flow from the discharge space
3 into the intake space and wherein a pressure in the discharge space is produced
4 by a difference between an air flow produced by the cooling system and an air
5 flow produced by the air movers.
- 1 4. The equipment enclosure of claim 1 wherein the first louver responds to a
2 reversal in the pressure differential between the intake space and the ambient
3 environment to connect the intake space to the ambient environment.

- 1 5. The equipment enclosure of claim 1 wherein the second louver responds to a
2 reversal in the pressure differential between the discharge space and the
3 ambient environment to connect the discharge space to the ambient
4 environment.

- 1 6. The equipment enclosure of claim 1 wherein the first louver is biased in the
2 absence of a pressure differential between the intake space and the ambient
3 environment to separate the intake space from the ambient environment.

- 1 7. The equipment enclosure of claim 6 wherein the first louver is biased by gravity.

- 1 8. The equipment enclosure of claim 6 wherein the first louver is biased by a spring.

- 1 9. The equipment enclosure of claim 6 wherein the first louver is biased by a flexible
2 hinge.

- 1 10. The equipment enclosure of claim 1 wherein the second louver is biased in the
2 absence of a pressure differential between the discharge space and the ambient
3 environment to separate the discharge space from the ambient environment.

- 1 11. The equipment enclosure of claim 10 wherein the second louver is biased by
2 gravity.

- 1 12. The equipment enclosure of claim 10 wherein the second louver is biased by a
2 spring.

- 1 13. The equipment enclosure of claim 10 wherein the second louver is biased by a
2 flexible hinge.

- 1 14. The equipment enclosure of claim 1 further comprising a plurality of first louvers.
- 1 15. The equipment enclosure of claim 1 further comprising a plurality of second
2 louvers.
- 1 16. An equipment enclosure that establishes an enclosed cooled environment
2 separated from an ambient environment and has a cooling system that generates
3 an air flow from an intake space in the enclosed environment to a discharge
4 space in the enclosed environment, the enclosure housing electronic equipment
5 with air movers that generate an air flow from the discharge space to the intake
6 space, the enclosure comprising:
 - 7 a plurality of first louvers that respond to a pressure differential between
8 the intake space and the ambient environment generated by a reduction in the air
9 flow generated by the cooling system when the cooling system fails to connect
10 the intake space to the ambient environment; and
 - 11 a plurality of second louvers that respond to a pressure differential
12 between the discharge space and the ambient environment generated by a
13 reduction in the air flow generated by the cooling system when the cooling
14 system fails to connect the discharge space to the ambient environment.
- 1 17. The equipment enclosure of claim 16 wherein the cooling system comprises a
2 heat exchanger element that reduces the air flow generated by the cooling
3 system when the cooling system fails.
- 1 18. The equipment enclosure of claim 17 wherein the heat exchange elements
2 connects the intake space to the discharge space.
- 1 19. A method of operating an equipment enclosure that establishes an enclosed
2 environment separated from an ambient environment and has a cooling system

3 that draws air from an intake space in the enclosed environment and discharges
4 air into a discharge space in the enclosed environment, the method comprising:
5 (a) providing a first louver that responds to a pressure differential between the
6 intake space and the ambient environment to connect the intake space to
7 the ambient environment when the cooling system fails; and
8 (b) providing a second louver that responds to a pressure differential between
9 the discharge space and the ambient environment to connect the
10 discharge space to the ambient environment when the cooling system
11 fails.

1 20. The method of claim 19 wherein the enclosure contains electronic equipment
2 with air movers that generate an air flow from the discharge space into the intake
3 space and wherein a pressure in the intake space is produced by a difference
4 between an air flow produced by the cooling system and an air flow produced by
5 the air movers.

1 21. The method of claim 19 wherein the enclosure contains electronic equipment
2 with air movers that generate an air flow from the discharge space into the intake
3 space and wherein a pressure in the discharge space is produced by a difference
4 between an air flow produced by the cooling system and an air flow produced by
5 the air movers.

1 22. The method of claim 19 wherein the first louver responds to a reversal in the
2 pressure differential between the intake space and the ambient environment to
3 connect the intake space to the ambient environment.

1 23. The method of claim 19 wherein the second louver responds to a reversal in the
2 pressure differential between the discharge space and the ambient environment
3 to connect the discharge space to the ambient environment.

- 1 24. The method of claim 19 wherein the first louver is biased in the absence of a
- 2 pressure differential between the intake space and the ambient environment to
- 3 separate the intake space from the ambient environment.

- 1 25. The method of claim 19 wherein the second louver is biased in the absence of a
- 2 pressure differential between the discharge space and the ambient environment
- 3 to separate the discharge space from the ambient environment.